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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/401,872	09/23/1999	RICHARD G. KETCHUM	09857/027001	5263	
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DENIS G MALONEY FISH & RICHARDSON PC 225 FRANKLIN STREET			EXAMINER		
			SUBRAMANIAN, NARAYANSWAMY		
BOSTON, MA	021102804		ART UNIT	PAPER NUMBER	
			3624	<u>-</u>	
			DATE MAILED: 07/02/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summany		Application No	o. 📉	Applicant(s)					
		09/401,872 KETCHUM ET AL.							
	Office Action Summary	Examiner		Art Unit					
	The MAILING DATE of this communication		Subramanian	3624	·				
Period to	• •				dress				
THE I - External form of the control	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, how within the statutory moved will expiration to cause the application	wever, may a reply be tir inimum of thirty (30) day e SIX (6) MONTHS from	nely filed s will be considered timely the mailing date of this co	/. mmunication.				
1)⊠	Responsive to communication(s) filed on 23 S	September 1999	<b>!</b> .		·				
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠ Thi	is action is non-	final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims									
4)🖂	Claim(s) 1-24 is/are pending in the application								
	4a) Of the above claim(s) is/are withdraw	vn from conside	ration.						
5)	Claim(s) is/are allowed.								
6)⊠	6)⊠ Claim(s) <u>1-24</u> is/are rejected.								
7)	7) Claim(s) is/are objected to.								
8)□	8) Claim(s) are subject to restriction and/or election requirement.								
Application	on Papers								
9) 🗌 🗆	The specification is objected to by the Examiner								
10) 🗌 🏾	The drawing(s) filed on is/are: a)□ accep	ted or b)⊡ objec	ted to by the Exar	miner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12)∐ T	he oath or declaration is objected to by the Exa	aminer.							
Priority u	nder 35 U.S.C. §§ 119 and 120								
13)	Acknowledgment is made of a claim for foreign	priority under 3	5 U.S.C. § 119(a)	)-(d) or (f).					
a)[	a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents	have been rece	eived.						
:	2. Certified copies of the priority documents have been received in Application No								
İ	Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
14)□ Ad	cknowledgment is made of a claim for domestic	priority under 3	5 U.S.C. § 119(e	) (to a provisional a	application).				
1	a)  The translation of the foreign language provisional application has been received.								
	cknowledgment is made of a claim for domestic								
Attachment(	•								
2) Notice 3) Inform	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5-6</u>	4)		(PTO-413) Paper No(s atent Application (PTO					
U.S. Patent and Tra PTO-326 (Rev		ion Summary		Part of I	Paper No. 1				

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#### **DETAILED ACTION**

1. Original claims 1-24 have been examined. The rejections are stated below.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 4-6, 10, 16, 17, 19 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Korhammer et al (US Patent 6278982).

With reference to claim 1, Korhammer teaches a system for trading of securities comprising: a plurality of client stations for entering quotes for securities; and a server process that receives quotes from the clients, aggregates the quotes and causes the aggregated quotes to be displayed for a plurality of price levels and other attributes desired by the customer on the client systems. (See Korhammer Column 4 lines 14-36). The term "system" is interpreted to include the electronic market and the term "desired attributes" is interpreted to include the total of all aggregated quotes.

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With reference to claim 4, Korhammer teaches a system of claim 1 wherein the plurality of price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

With reference to claim 5, Korhammer teaches a system of claim 1 wherein the aggregate window displays aggregate interest for both sides of a market. (See Korhammer Column 8 lines 61-68).

With reference to claim 6, Korhammer teaches a system of claim 1 which includes a process to update the aggregate window. (See Korhammer Column 9 lines 27-44)

With reference to claim 10, Korhammer teaches a computer network for trading products including an aggregate window that displays aggregated quotes for a plurality of price levels of a product traded in the market. (See Korhammer Column 4 lines 19-36). The computer network includes a graphical user interface for an electronic market.

With reference to claims 16 and 17, Korhammer teaches a method of operating an electronic market for trading products including aggregating and displaying information on a product and sorted by price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also.

With reference to claim 19, Korhammer teaches a method of claim 17 wherein the price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

With reference to claim 24, Korhammer teaches a consolidating computer system for use in trading a product and providing aggregate data on a product sorted by a plurality of price

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levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The other desired attributes are interpreted to include aggregate non-attributable interest in a product. The consolidating computer system includes a computer program product residing on a computer readable media.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2, 3, 7-9, 11, 14, 15, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhammer et al (US Patent 6278982) in view of Gutterman et al (US Patent 5297031).

With reference to claims 2, 3, and 7-9, Korhammer teaches a system for trading of securities comprising: a plurality of client stations for entering quotes for securities; and a server process that receives quotes from the clients, aggregates the quotes and causes the aggregated quotes to be displayed for a plurality of price levels and other attributes desired by the customer on the client systems. (See Korhammer Column 4 lines 14-36). The term "system" is interpreted to include the electronic market and the term "desired attributes" is interpreted to include the total of all aggregated quotes and the aggregate size of all non-attributable quotes/orders. The

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quotes displayed are for both sides of the market including the inside market and the system includes a graphical user interface at the client stations.

Korhammer fails to teach the steps of: a current quote window to be displayed in proximity to the aggregated quotes window of a graphical user interface, the current quote window including an identifier of aggregate size of all non-attributable quotes/orders at the inside price and the aggregated quotes including the two next best price levels besides the inside market quote.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window. This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregate size of the non-attributable quotes/orders at the inside market quote and information about the aggregated interest immediately at and around the inside

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market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

With reference to claims 11, 14 and 15, Korhammer teaches a computer network for trading products including an aggregate window that displays aggregated quotes for a plurality of price levels of a product traded in the market. (See Korhammer Column 4 lines 19-36). The computer network includes a graphical user interface for an electronic market. The price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

Korhammer fails to teach the steps of a current quote window to be displayed in proximity to the aggregated quotes window of a graphical user interface, and the aggregated quotes including the two next best price levels besides the inside market quote.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better

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feel for the market by having the current quote window in proximity to the aggregate window. This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

With reference to claims 18, 20 and 21, Korhammer teaches a method of operating an electronic market for trading products including aggregating and displaying information on a product and sorted by price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also. The electronic market that includes computer network for trading products includes the graphical user interface also.

Korhammer fails to teach the steps of: displaying the quotes corresponding to inside quote and the two next best price levels and displaying a window for aggregate data and a window for current quote in proximity to the aggregate window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See

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Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window. This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

6. Claims 12, 13, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhammer et al (US Patent 6278982) in view of Gutterman et al (US Patent 5297031) and further in view of Martyn (US Patent 6195647).

With reference to claims 12 and 13, Korhammer teaches a computer network for trading products including an aggregate window that displays aggregated quotes for a plurality of price levels of a product traded in the market. (See Korhammer Column 4 lines 19-36). The computer network includes a graphical user interface for an electronic market.

Korhammer fails to teach the steps of: displaying adjacent to an aggregate window a current quote window that may have negotiable quotes of participants in the system and a special

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quote that represents total aggregate quotes at a current market level displayed in the aggregation window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level including the current market level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and act on their analysis quickly.

Both Korhammer and Gutterman fail to teach the step of including the negotiable quotes of participants in the current quote window.

Martyn teaches the step of allowing the users to input their negotiation quote in a window of their trading terminal. (See Martyn Column 9 lines 24-28).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman and Martyn in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The

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combination would also permit them to analyze the markets in a timely manner and put in their negotiable orders quickly.

With reference to claims 22 and 23, Korhammer teaches a method of operating an electronic market for trading products including aggregating and displaying information on a product and sorted by price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also.

Korhammer fails to teach the steps of: displaying adjacent an aggregate window a current quote window that may have negotiable quotes of participants in the system and a special quote representing total aggregate quotes at a current market level displayed in the aggregation window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level including the current market level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all

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the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and act on their analysis quickly.

Both Korhammer and Gutterman fail to teach the step of including the negotiable quotes of participants in the current quote window.

Martyn teaches the step of allowing the users to input their negotiation quote in a window of their trading terminal. (See Martyn Column 9 lines 24-28).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman and Martyn in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and put in their negotiable order quickly.

### Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- (a) Crisostomo Garcia (US Patent 6272474)(August 7, 2001) Method for Monitoring and Trading Stocks via the Internet Displaying Bid/Ask Trade Bars

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (703) 305-4878. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached at (703) 308-1065.

The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

N. Subramanian June 27, 2002

> VINCENT MILLIN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600

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